Nova Scotia Department of Natural Resources

Business Plan 2004-05

Report DNR 2004-01
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1 Message from the Minister and the Deputy Minister

As the Minister and the Deputy Minister of the Department of Natural Resources, we are pleased to share with you our department's business plan for 2004-05. The plan describes the intentions and commitments of Natural Resources from April 2004 to March 2005. The priorities outlined in this plan were developed to support the government's business and fiscal plans and are in addition to the department's on-going, operational work. The priorities reported here reflect the initiatives that are planned for the up-coming fiscal year, given the department's 2004-05 budget allocation.

The department is committed to the stewardship and sustainable management of our natural resources and Crown lands using environmentally responsible approaches to resource management and land use planning. Through sustainable management we provide support to the provincial economy and encourage economic growth, while still meeting our protection and conservation related responsibilities. This support will be a major focus of the department's programs and activities for the up-coming year.

The department will also continue to deal with the effects of several major weather disturbances which struck the province in 2003-04. The severe flooding in the spring, Hurricane Juan in the fall, and the heavy snowfall in the winter, have affected both the department and the province's natural resources in varying degrees, and their impact will continue to be felt in 2004-05.

We are committed to the implementation of this business plan which, for us, is our first plan while at the department.. As we move forward as stewards of our natural resources we ask for your continued support to help make Nova Scotia an attractive place to live, visit, and do business.

original signed by

Honourable Richard Hurlburt
Minister of Natural Resources

Date: April 22, 2004

original signed by

Peter C. Underwood
Deputy Minister of Natural Resources

Date: April 22, 2004

2 Mission

The mission of the Department of Natural Resources is "to build a better future for Nova Scotians through responsible natural resources management".

3 Planning Context

The department has broad responsibilities relative to the development, management, conservation and protection of forest, mineral, park and wildlife resources and the administration of the province's Crown land.

The department is affected by numerous pressures, both external and internal, that require attention. The department's plan for 2004-05 attempts to deal with these pressures. Six particular areas, which will especially impact the department's operations, are listed below.

3.1 Increased Competing Demands for a Limited Land and Resource Base

A principal responsibility of the department is the management of provincial Crown lands in the province. Just over a quarter of the land in Nova Scotia is provincial Crown land. This is the second lowest proportion of Crown lands of all the provinces and territories, with only Prince Edward Island having a lower proportion. There are strong public expectations, and numerous competing demands, for the use of this limited public land and resource base, and how it is managed.

There is also pressure to add to the provincial Crown land base by acquiring properties with specific characteristics valued by Nova Scotians. In addition, the urbanization of the central part of the province has led to demands to limit Crown land resource development and to provide additional park facilities close to the population base. High demands being placed on beach parks in and near HRM have been particularly noticeable in recent years.

3.2 Demographic Change

Since 1986, the population has become increasingly concentrated in the central part of the province, in Colchester, Halifax, Hants, and Kings counties. Statistics Canada figures show that in 1986 about 51% of the population lived in these four counties with the remainder in the other 14 counties. By 2002, the central part of the province accounted for 56% of the population.

Significant changes are also expected in the province's age distribution. Statistics Canada has forecast that from 2002 to 2026, the percentage of Nova Scotians less than 20 years of age will fall from 24% to 18% while the percentage of the population 65 years and older will increase from 14% to 24%.

Just as these changes will have major implications for our health and education systems, so too will the demand for many of the department's services and programs be affected by the changing preferences and expectations of a relatively older and increasingly urban population.

3.3 Climate Change and Weather

The Government of Canada reports that "...the 20th century was the warmest century of the last millennium; the 1990s were the warmest decade of the last century....". What the long-term effects of climate change on the province will be are unknown. We do know that during 2003-04 the province was hit by flooding, a hurricane, and a record amount of snowfall from a winter storm. In addition, a major forest fire occurred in the western end of the province during the year. Weather related events such as these can have a profound influence on the department's operations, and budget requirements, both positive and negative. Forest fires, insect infestations, wildlife and forest health, and park attendance are all affected by weather conditions. Ecosystems may also be affected resulting in changes

in wildlife habitat and native species health and the possible introduction of exotic pests (non-native wildlife).

3.4 Deteriorating Physical Infrastructure

The department has seen significant reductions in budget and staffing levels since the mid-1990's. One consequence has been a deterioration in the department's infrastructure as replacements and some maintenance have been deferred. This includes our fleet of vehicles, helicopters, buildings, parks facilities, and equipment. The need to meet budgetary challenges during the past decade has resulted in a deferral of infrastructure maintenance and postponed asset replacement.

3.5 Globalization Impacts

Our resource sectors are a part of the global economy and make up the foundation industries in Opportunities for Prosperity, A New Economic Growth Strategy, which is the province's economic growth and development strategy. Forestry and mineral products account for a significant proportion of our provincial exports. Although the demand for many natural resources seems to be recovering, resource prices are cyclical and are frequently volatile. The appreciation of the Canadian dollar, relative to the U.S. dollar, has had the effect of making Canadian exports more expensive. Trade issues, such as the current softwood lumber exports dispute with the United States and pressure for forest products to receive environmental certification, have a significant impact on the companies that make up our resource industries and how they operate. National developments, such as the federal species at risk legislation, have implications for Nova Scotia. Meeting demands by out-of-province visitors for opportunities to enjoy the province's natural beauty and for outdoor recreation requires that tourism and recreation values be considered as part of Crown land management.

3.6 Public Perceptions and Expectations

Many members of the public are unaware of the true extent of the province's foundation industries and how they operate. The forestry and minerals sectors are made up of much more than just wood harvesting and mineral extraction. Exploration, forest management, geoscience, geomatics, survey, mapping, environmental, transportation, distribution, and financial services are all required. The resource sector needs sophisticated machinery and equipment, high technology products, and computers to operate and compete globally. Skilled labour is needed to operate these production systems. Resource sector jobs also tend to be highly paid and relatively long term, compared to the minimum wage, seasonal positions found in some other sectors. Manufacturing, fabrication, and assembly add value to the natural resources found in the province. Nova Scotia's mineral and forestry industries are among the province's leading industries in their application of advanced technology as companies make investments in technology to minimize costs, increase productivity, and improve environmental performance.

Some members of the public do not recognize the efforts being made by the resource sector to operate on a sustainable basis, to meet environmental standards and regulations, and to carry out programs and activities which support conservation and preservation objectives in the province.

4 Strategic Goals

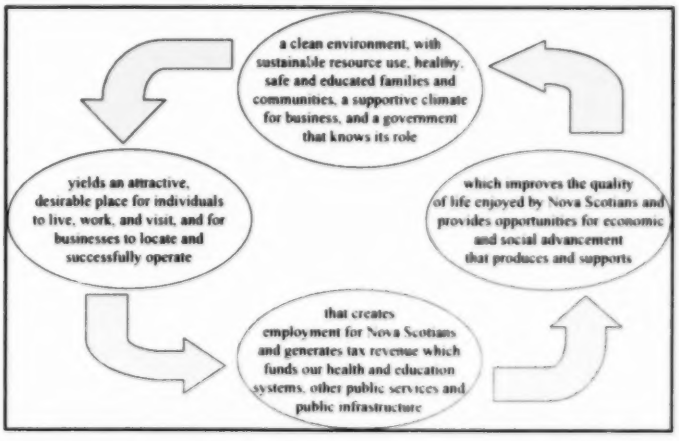
Five broad goals were identified as part of a strategic plan prepared for the department in the mid-1990's. Since then, the goals have been adjusted slightly to better align them with the government's overall goals. The department's goals are:

- to achieve sound natural resources stewardship;
- to conserve the diversity of Nova Scotia's natural environment;
- to support Nova Scotia's economy through the sustainable development of natural resources;
- to improve the quality of life in Nova Scotia; and
- to manage the department's financial, physical, human, and information resources effectively and efficiently.

Government's major priorities, simply stated, are health care (better, faster health care and healthier Nova Scotians), education (learning is succeeding), building greater prosperity, fiscal responsibility and accountability, and protecting what Nova Scotians value.

Natural resources provide significant economic, social, cultural, and environmental benefits to Nova Scotians, and the best available scientific knowledge must be used for their sound management. The department's aim is to maintain an appropriate balance so that resource use continues to provide a substantial contribution to the provincial economy (and especially our rural economy), while being carried out in a socially responsible and sustainable manner that meets the department's conservation and preservation responsibilities. Our natural resources are one of the province's features that make it an attractive place to live, visit, and do business. In addition, revenue generated from the resource sector (both directly and indirectly) helps to fund our health and education systems, and other important public services.

The following diagram shows how government's priorities are supported by the department, and how our society, economy, environment, and natural resources are all inter-connected.


a clean environment, with sustainable resource use, healthy, safe and educated families and communities, a supportive climate for business, and a government that knows its role
which improves the quality of life enjoyed by Nova Scotians and provides opportunities for economic and social advancement that produces and supports
that creates employment for Nova Scotians and generates tax revenue which funds our health and education systems, other public services and public infrastructure
yields an attractive, desirable place for individuals to live, work, and visit, and for businesses to locate and successfully operate

5 Core Business Areas

The department's activities can be allocated to one of the following core business areas:

- Natural Resources Management;
- Crown Lands Administration; and
- Infrastructure and Support Services.

DNR manages natural resources on an integrated basis. Individual resource sectors, such as forestry, wildlife, minerals, and parks, have not been categorized as separate core business areas in keeping with our integrated approach to the management of the natural resources falling in the department's areas of responsibility.

5.1 Natural Resources Management

Natural Resources Management covers the department's broad responsibilities relative to the development, management, conservation, use, and protection of forest, mineral, park and wildlife resources.

Forestry-related responsibilities, on both Crown and private lands, include forest management planning and research, developing and implementing strategies to ensure sustainable forests, maintaining the provincial forest inventory, producing data on the province's forest resources, monitoring primary forest production, and coordinating extension programs and support for industry development. On private lands, the department leverages expenditures on silvicultural activities by providing a portion of the funding. DNR also provides technical and professional assistance and information, supports the construction of forest access roads, and monitors for compliance with regulatory requirements related to forest harvesting and forest management. On Crown lands, the department administers the licensing of land for timber and other resource uses. Funding is provided to invest in silviculture in order to ensure forest sustainability, and a network of access roads on Crown lands is maintained. Protection-related responsibilities include the development and operation of programs designed to protect Nova Scotia forests from fire, insects and disease, and to protect special sites, watercourses, and significant wildlife habitats.

Mineral responsibilities include the implementation of policies and programs dealing with exploration, development, management, and utilization of mineral resources. The department develops and implements strategies to support and promote the mineral resource sector, maintains the provincial geoscientific database and inventory of mineral resources, monitors mineral production and monitors for compliance with regulatory requirements, administers mineral royalties and the provincial mineral rights tenure system, coordinates interdepartmental regulatory review of mineral development projects, and provides professional assistance and advice with respect to mineral resources and provincial geology. Geological studies, undertaken to document and understand the province's geology, help to document the province's mineral endowment and define the potential for new mineral resources. These programs also provide needed information to support sound public policy

decisions in areas such as mineral resource development, environmental protection, land use, and public health and safety

Park responsibilities include the planning, design, development, and operation of over 120 camping and day-use park, and natural area parks and park reserves, in addition to supporting facilities on Crown lands, various trails and other outdoor recreational opportunities and, through partnerships with community groups, on private lands. Parks and recreation programs and services provide quality recreational experiences to Nova Scotians and visitors to the province, while ensuring environmental, heritage and resource protection.

Wildlife responsibilities include research, development and delivery of programs, policies, and legislation for the management and conservation of the province's wildlife resources and their habitats, including endangered species initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. This also includes the provision of educational and viewing opportunities at the provincial wildlife park in Shubenacadie.

Enforcement responsibilities include the development, coordination and operation of a departmental resource law enforcement and compliance program, which also provides enforcement services to the Department of Agriculture and Fisheries, the protected areas program within the Department of Environment and Labour, and the Canadian Wildlife Service.

5.2 Crown Lands Administration

This core business area covers the department's activities related to the administration of the province's Crown lands. Crown Lands Administration encompasses the acquisition, leasing and disposal of interests in Crown lands, co-ordination of government surveying requirements, carrying out Crown lands boundary line maintenance, maintenance of provincial Crown lands records and the Crown lands GIS cadastral database.

Nova Scotia's land mass is approximately 13 million acres, of which about 3.5 million acres are administered and controlled by the Department of Natural Resources as provincial Crown lands (other departments, like Transportation and Public Works and the Department of Environment and Labour, also administer land holdings, such as highways and land with provincial government buildings, and wilderness areas, respectively). The department is also responsible for submerged lands, both inland and along the province's nine thousand kilometres of coastline. Approximately 20 land-related statutes are administered by the department, as well as the provision of land-related services, such as land administration and designations, to other departments, such as the Department of Environment and Labour, and activities undertaken in partnership with non-government conservation oriented organizations aimed at securing ecologically significant lands.

5.3 Infrastructure and Support Services

Infrastructure responsibilities include the maintenance and replacement of a fleet of hundreds of highway and other specialized vehicles (such as fire trucks, snowmobiles, ATVs, and tractors), as well the operation, maintenance and replacement of five helicopters. The road vehicles are heavily used in every aspect of the department's program delivery, such as fire

suppression and enforcement, and provide a range of capabilities from staff transportation to heavy equipment operations. The helicopter uses include forest fire detection and suppression, ground search and rescue, and natural resource research and management. The DNR fleet (particularly helicopters) play an important role in the province's emergency preparedness planning. Department facilities range from offices and depots, to pole barns, aircraft hangars, fire towers, and laboratories.

Central support services includes human resources, information technology, financial, communications, legal, planning, asset management, risk management, records management, office administration, library services, and the Office of the Minister and Deputy Minister. As the host department for the Resources Corporate Services Unit, financial services, human resources, and information technology are provided to the Department of Agriculture and Fisheries, the Department of Environment and Labour, the Department of Energy, and a number of agencies. Several other departments and numerous agencies also receive certain services from the Resources Corporate Services Unit. As a result, substantial budget expenditures reported as part of the department's budget are used to provide support to other departments and agencies.

6 Priorities

The following are the main priorities that have been identified for the Department of Natural Resources for 2004-05. Priorities are grouped within the core business areas previously identified. These priorities are in addition to the department's regular on-going operations.

6.1 Natural Resources Management

Priorities for this core business area are primarily related to the department's on-going responsibility for sound natural resource stewardship.

6.1.1 Implementation of the Forest Strategy

The Forest Strategy consists of nine major policy, program and regulatory elements, the focus of which is on achieving sustainable forestry and forest use in the province. In 1998, changes were made to the *Forests Act* to introduce the concept of sustainable forestry and to provide the authority needed to implement the Forest Strategy. The strategy and progress on the key elements are reviewed regularly to ensure that goals and objectives are being met effectively and that Departmental resources are used efficiently.

During 2003-04 several regulatory changes were approved. These changes addressed needs identified by the forest sector and the department, and will result in clarification of reporting requirements, improved administration, more effective enforcement, and simpler processes for meeting these requirements and gaining compliance.

In 2004-05 priorities will be implementing the revisions to these regulations, finalizing the Code of Forest Practice framework document of principles, preparing for the review of Code guidebooks, and preparing the information and data which will form the core of a State of Forests report to be released in 2005-06.

Specific priorities planned that are related to the implementation of the Forest Strategy are:

- Revisions made to the *Registration and Statistical Returns Regulations* and to the *Forest Sustainability Regulations* took effect in January 2004. Staff will work closely with those impacted during the year to ensure that changes in requirements and obligations to maintain appropriate records and documentation are clearly understood. In particular, a compliance and enforcement strategy for the new requirements related to the export of primary forest products from Nova Scotia will be implemented.

- A draft framework for the Code of Forest Practice was made available in 2003-04 for public review. Comments received were reviewed and, where appropriate, have been incorporated into the final document, which is being prepared for release in 2004-05. Companion documents, referred to as "guidebooks", will be completed to final draft form in 2004-05.

- The government is committed to producing a report on the state of Nova Scotia's forests. The report will consolidate many forms of data and information related to the province's forest resource to provide a public understanding of conditions, characteristics, use and trends related to the forest resource and its use.

- An essential component of the State of Forests report will be the presentation of the results of the provincial wood supply analysis process to be completed during 2004-05. This analysis is conducted using a computer-based model which utilizes current provincial forest inventory information, wood harvest data from the Registry of Buyers, and annual silviculture information compiled under the *Forest Sustainability Regulations*. The wood supply analysis is used to assess resource utilization opportunities, develop forest management programs, and determine the amount of silviculture required annually to support wood demand.

6.1.2 Support the Mineral Industry and Other Geoscience Information Users

The department provides programs, services and information that are utilized by the province's mineral industry and by a number of other groups and the public. Departmental priorities for 2004-05 are:

- Department staff will work to provide for a continuing coal industry in Cape Breton by addressing the issuing of new coal leases in the Sydney coalfield following surrender of Special Mining Lease 90-2 (coal) by the Cape Breton Development Corporation (CBDC). The first tender call for surface coal resources, issued in December 2003, will be evaluated and new coal leases issued where appropriate. With the help of a consultant expert in the international coal mining industry, a tender will be completed for the Donkin coal resource. Staff will work with officials of CBDC and the federal government to ensure that commitments to fully evaluate and account for environmental liabilities on CBDC lands are met, and to ensure that a process for remediation is satisfactorily under way.

- It is anticipated that the amendments to the *Mineral Resources Act* and regulations will be proclaimed. Following proclamation, the department will begin a comprehensive review of the legislative framework for mineral exploration and development in the

province with the objective of making significant revisions to the *Mineral Resources Act* and improving the management and administration of all mineral resource commodities in the province.

- In cooperation with Nova Scotia Economic Development, a process to prepare a mineral development strategy will be initiated, including a review of the province's mineral policy and development of an action plan to ensure that the department's programs are focused on supporting and encouraging sustainable economic development related to the use of the province's geological resources. The department will continue to facilitate efficient and effective reviews of mineral development projects through a coordinated "one-window" process, including the provision of scientific, technical and policy advice to other departments.

6.1.3 Integrated Resource Management Planning on Crown Lands

The department defines Integrated Resource Management, or IRM, to be "a planning and decision-making process that involves the coordination of resource management policies, programs and activities so that long-term sustainable benefits are optimized and conflicts among resource users are minimized." An IRM process is used for Crown lands administered by DNR so that we are able to take into account the relationships between the various resource uses and effects of management practices of one resource upon others.

The IRM process includes two major parts. First, the planning activity identifies special land features, uses and resource values, and incorporates these into databases, goals and objectives for Crown land. An inventory of values has been identified by department staff, other departments and agencies, the general public, and stakeholders. Second, based on the planning information identified, the land use decision making part of the process recognizes and conserves special land features and uses, optimizes long term sustainable resource values, and minimizes conflicts.

The province is categorized in 39 ecodistricts. A Long Range Management Framework (LRMF) is an ecologically based land use planning document. Eventually each ecodistrict will be covered by an LRMF. Work planned for 2004-05 includes:

- completion of ecological management guidelines, which provide the basis for the LRMFs;

- completion of the Mulgrave Plateau LRMF Pilot Project including an assessment and evaluation of the project and its process;

- development of 'special management practices' for the IRM values identified on Crown land;

- initiation of the LRMF process for the next ecodistricts - using developed criteria these have been identified on a priority basis; this includes identifying and selecting members for public regional advisory committees, their orientation to the LRMF process, additional information gathering on the ecodistrict by department staff, information synthesis and analysis, and assessment of management options.

6.1.4 Provide an Effective Parks and Recreation Program

The department supports the planning, design, development and operation of more than 120 camping and day-use parks, in addition to providing trails and other outdoor recreational opportunities on Crown land. During the fiscal year a number of initiatives and activities are planned.

- Securing long-term use and public access is an important aspect of park development. The department will identify park and outdoor recreation opportunities that support program objectives, including outdoor recreation experiences and the protection of unique and desirable cultural and heritage values.

- Part of the park development process involves preparing individual management plans for properties in advance of any significant on-site development taking place. Management plans provide the context for future development by establishing the opportunities and constraints that exist. For 2004-05, management plans are expected to be completed for several properties, including Second Lake, West Mabou and South Maitland. Work on the development of management plans for several other properties, including Cape Split and Long Lake, will continue during the year but these plans are not expected to be completed during 2004-05.

- Partnerships are a key aspect of furthering community involvement and commitment to park development and are another avenue in securing the long-term sustainability of parks. A number of partnerships are in place. During 2004-05 the department will maintain our existing partnerships, and provide various park services in cooperation with these partners. A key property for future partnerships and development opportunities is McNabs and Lawlor Islands Provincial Park, located in the centre of Halifax Harbour. The department will also work with other government departments to address cross jurisdictional mandates. To support the development of partnerships, the department will introduce guidelines for the establishment of "Friends of... Provincial Parks".

- The department will work with the Halifax Regional Municipality and the Shubenacadie Canal Commission to manage public areas and access points along the Shubenacadie Canal. A long range plan to secure infrastructure maintenance and development will be prepared in cooperation with the Shubenacadie Canal Commission. The department will assist the Shubenacadie Canal Commission in their efforts to identify and secure new partnerships in support of their mandate.

- Recovery efforts resulting from damage caused by Hurricane Juan will continue into 2004-05. The department's three most heavily impacted park properties, McNabs Island, Porters Lake and Cole Harbour Heritage Park, will require substantial re-development efforts.

6.1.5 Conserve Wildlife and Wildlife Habitat

The promotion and implementation of the principles and ethics of conservation and sustainable use of wildlife populations, habitats and ecosystems in Nova Scotia is a priority of the department. This includes research, development and delivery of programs, policies, and legislation, including species at risk initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. Also included is the provision of educat' nal and viewing opportunities at the provincial wildlife park in Shubenacadie. Specific priorities are listed below.

- The department will continue programs, policies and legislation for the implementation of the National Accord for the Protection of Species at Risk, the Nova Scotia Endangered Species Act and the federal Species at Risk Act which was recently approved. This will be done in part by evaluating the status of species, listing species, initiating recovery plans and engaging in recovery actions. A bilateral agreement with the federal government will be negotiated in order to ensure that programs can be exercised in a coordinated and cooperative manner.

- DNR will monitor and regulate harvested wildlife populations, including deer, moose, bear, furbearers and small game, and work cooperatively at provincial, national and international levels to help ensure their conservation and sustainable use.

- DNR will maintain and update a GIS database of significant wildlife habitats and species to provide information for planning, decision-making and management action.

- The *Wildlife Habitat and Watercourses Protection Regulations* will continue to be implemented with an emphasis on monitoring compliance in forest harvesting operations throughout the province.

- The department will work with partners in projects such as the Eastern Habitat Joint Venture, the Black Duck Joint Venture and the Sea Duck Joint Venture as part of Nova Scotia's commitment to wetland and waterfowl conservation under the North American Waterfowl Management Plan. DNR will also manage the Habitat Conservation Fund and the Species at Risk Conservation Fund to enable funding of non-government organizations for important wildlife conservation projects.

- The Provincial Shubenacadie Wildlife Park will provide a high quality program with a focus on ec' cational opportunities including an educational outreach program. The department will partner with Ducks Unlimited Canada to provide for a new wetland interpretative and educational centre at the Wildlife Park to enhance public awareness of wetland habitats and waterfowl.

- DNR will review the current array of Wildlife Management Areas and Sanctuaries in order to determine which ones still serve an important role for wildlife conservation and to determine where new ones are required.

6.1.6 Utilize Department Information and Expertise

The department has a considerable amount of scientific and technical information available. Several department priorities for 2004-05 relate to our use of this natural resources-related knowledge and information, as well as activities aimed at making it easier for others to access and use our information.

- The availability and utility of digitally-based geoscientific information on the web will be improved during the year. The department will also work with municipalities, community groups, rural development authorities and others to increase their use of geoscientific and mineral resource information in land and resource use decision making.

- Improvements in public safety will be realized by continuing the program to cap and/or fill abandoned mine openings on Crown lands. As part of this program, the department will provide information and advice on abandoned mines to private landowners and municipalities. Remediation of high risk abandoned mine openings on Crown lands will be undertaken, although the amount carried out will depend on the availability of funding and the complexity of the sites being remediated.

- Educational material will be provided to youth, educators, resource sector clients, the media, and the general public on sustainable and responsible resource management and use practices, department programs, and changes in legislative requirements.

6.1.7 Meet National Obligations

The department is working with the federal government and other provinces on a number of areas. Specific activities planned for 2004-05 include the following:

- The department is a participant in a federal-provincial-territorial initiative to develop a Canadian Geoscience Knowledge Network. This initiative will make the information holdings of all Canadian government geoscience agencies available in compatible digital formats over the Internet.

- The department is participating in the National Orphaned and Abandoned Mines Program. This program is a joint industry-government initiative to address the legacy of orphaned/abandoned mines in Canada with all the associated issues such as environmental liability, human health concerns and the financial cost of clean-up. The department is developing information on orphaned/abandoned mine sites in Nova Scotia as part of the compilation of a national inventory as a first step in this program.

- The department is participating in a national working group to assess changes to natural resource taxation. This group is considering how recent changes to the federal tax system effect the mineral resource industry. The department is providing input and advice to the Department of Finance with respect to consideration of an investment tax credit for exploration in Nova Scotia, harmonized with the federal tax credit.

6.1.8 Provide Forest Protection Services

Protection of Nova Scotia forests from fire, pests and disease is mandated through the *Forests Act* and is a continuing priority for the department. The extent of forest fires and pest occurrences in the province can vary considerably from year to year and can place a considerable burden on the department's budget. The fire management and integrated pest management programs must be able to effectively address current and future requirements, while functioning within budgetary limitations. Specific priorities are listed below.

The impact of Hurricane Juan in the fall of 2003 has changed the short term focus of Forest Fire Management and Integrated Pest Management activities. The increased volume of dead, dying and damaged forest material in the central region of the province required amendments to protocols and procedures. Examples of new activities include:

- A review of forest fire danger indices to provide for earlier setting of open fire bans and wood closures, including associated media communication needs.
- An increased need for continuing work of the first Atlantic Canada forest fuel classification system.
- Conducting basic fire risk assessments and providing wildland fire behaviour expertise to the Halifax Regional Municipality (HRM) on the increased fire hazard and threat to adjoining properties.
- The preparation of a Preparedness Plan for Initial Attack to review the availability, access and use of fight fighting resources.
- An insect and disease pest risk assessment and analysis of potential problems with elevated pest populations in the damaged forest stands.

6.2 Crown Lands Administration

Priorities for this core business area are related to the administration of the province's Crown lands. These include updating several pieces of legislation, acquiring additional land, the distribution of land information, and meeting operational obligations and demands for service.

6.2.1 Provide an Up to Date and Responsive Legislative Framework

The effective administration of Crown land depends upon the existence of an up to date legislative and policy framework. Work planned for 2004-05 includes the following.

- A draft of a new *Trails Act* was prepared in the fall of 2002 which included a streamlined process for formal registration of community trails and limited liability for community trail operators. In co-operation with the Office of Health Promotion - Sport and Recreation (who will take the lead) a consultation process was planned to obtain input from trail interests. DNR will collaborate with the Nova Scotia Trails Federation to move this forward in 2004. The information received through this process will be considered in the draft of the new *Trails Act*.

- A preliminary review of the current *Beaches Act* and related policy issues was completed in 2003-04, along with an examination of the legislative regimes being utilized in other jurisdictions. In addition, a review of Kingsburg Beach was undertaken by a consultant. These will be used to develop options for improved management of protected beaches.

- The department will collaborate with Service Nova Scotia & Municipal Relations and the Department of Environment and Labour to consider ways to encourage private land conservation. The department has held discussions with SNSMR to determine what could be done to provide for relief of property taxes. The provincial Private Land Conservation Enhancements (PLACES) Committee will report its recommendation to the Department of Environment & Labour to see what can be done in this regard.

6.2.2 Improve Opportunities for Land Acquisition

During both 2002-03 and 2003-04, the department had a Tangible Capital Asset (TCA) allocation of $1 million to support acquisitions on behalf of DNR and DEL. In addition, in 2002-03, a special allocation of $5 million supported the acquisition of Cape Split. There is continued pressure to add other properties valued by Nova Scotians to the Crown land base. The following activities are planned for 2004-05.

- Subject to the availability of TCA funding, the department will acquire coastal lands, wilderness area inholdings for the Department of Environment and Labour, and other properties that support department and government initiatives and programs.

- Partnerships with non-government conservation organizations (such as the Nature Conservancy of Canada, Ducks Unlimited, Nova Scotia Nature Trust), resulting in the leveraging of private sector funds for land acquisition, will also be encouraged and supported.

- An acquisition policy is being drafted for public distribution. We anticipate the final draft will be ready for public distribution in 2004-05.

6.2.3 Streamline Land Administration Processes

The department, in 2000, received approval through the Ministerial Land Transaction regulations to acquire land, not exceeding certain limits with the Minister's approval. This regulation reduced processing tasks/time allocated to the acquisition process dramatically. The department is considering the possibility of seeking approval to increase the limits.

6.2.4 Improve Access to Land Information

The department holds a considerable amount of land information. However much of this information is paper-based, which limits its usefulness. The following activities began in 2003-04, and will continue in 2004-05, in order to allow the improved utilization of Crown land information and to facilitate access by users of this information.

- Continued integration of Crown land information with the resource specific geographic information system databases within the department, and improving the availability of Crown land information remains a priority. Expanding the availability of this

information internally within the department through Internet access to be supported by a new server, is being pursued. Work is also being carried out on the conversion of paper based records to an electronic format.

- Planning for the migration of Crown lands into the new Land Registration system (Registry 2000) will be a priority. Department staff are working with SNSMR to develop a process and schedule for migration. Land presently being acquired will be immediately entered into the new system. A process for entering ungranted/surveyed land is being fine tuned for implementation in 2004. Discussion on the process/options involving the remainder of Crown (ungranted/unsurveyed/claimed and reconveyed Crown land prior to Land Registration implementation) will continue.

6.3 Infrastructure and Support Services

The department has a considerable investment in buildings, other facilities, and equipment necessary for its on-going operation. The maintenance, and the occasional replacement, of these facilities and equipment is an on-going priority.

6.3.1 Infrastructure / Equipment Maintenance and Replacement

A number of projects have been identified as priorities for repairs or replacement during 2004-05. This includes activities related to various departmental offices, depots, park facilities, roads, parking lots, mandatory helicopter maintenance, vehicles, fire towers, laboratories, and a range of other planned work

6.3.2 Implementation of Initiatives to Improve Internal Efficiency

There are some specific projects being implemented during the coming year. Major priorities planned for 2004-05 include the following.

- The implementation of a new, department-wide records management system, started during 2003-04, will be completed. The major part of this project still to be completed involves the transfer of records in small individual systems or records administered manually, to this new integrated electronic system. As part of this transfer, all existing files will be converted to the government standard records classification system. The completion of this system will enhance record management capabilities within the department by providing department staff outside Head Office with access to an electronic system, and providing the department with the means to better management our information holdings.

- A number of initiatives will be undertaken to provide and maintain an information technology infrastructure (desktop computers, network equipment, data storage devices, and applications) capable of meeting the department's requirements. An example is the planned installation of a new file server as part of the Halifax office's network. Equipment will also be added to provide additional electronic information storage capacity. This is expected to alleviate a severe shortage of storage capacity faced by staff in the department's head office currently using this network.

- The department will implement the Department of Transportation and Public Works' Government Services for Inventory Control (GSIC) system as an asset management system. This is a government wide system that, once in place, will provide an accurate, complete, and up-to-date record of the department's assets.

7 Budget Context

The following table provides budget information for the department.

Department of Natural Resources - Budget Context			
	2003-04 Estimate	2003-04 Forecast	2004-05 Estimate
	$ Thousands	$ Thousands	$ Thousands
Ordinary Revenues	$7,475	$8,410	$8,395
TCA Purchase Requirements	$1,420	$1,792	$3,120
Net Program Expenses:			
• Senior Management	$550	$550	$556
• Corporate Services Unit *	$6,657	$6,573	$6,624
• Renewable Resources	$8,993	$9,293	$9,140
• Mineral Resources	$3,249	$3,249	$3,212
• Regional Services	$33,309	$32,626	$33,103
• Planning Secretariat	$4,230	$3,832	$4,252
• Land Services	$2,172	$1,149	$2,265
Total - Net Program Expenses	$59,160	$57,272	$59,152
Funded Staff (Full Time Equivalents)	848.4	839.6	848.4

* Note that the figures shown for the Corporate Services Unit includes the cost of financial, human resources, and information technology related services provided to a number of other government departments and agencies.

8 Outcome and Performance Measures

The information provided in the following tables helps to provide an indication of the department's success in meeting our goals. Although some of the measures provided track outputs (what was done) as opposed to outcomes (what results were achieved), they are important to the department and help to explain what the department is trying to achieve in certain areas.

Outcome and performance measurement is an evolving process. Over time this performance measurement section will be improved by replacing, refining, or consolidating several of the output focused measures with other measures that will more accurately record our success in achieving desired outcomes.

More detail on performance measures can be found on the department's website. This material was released in December 2003 as a supplement to the department's 2002-03 Accountability Report. The location for the information on these measures can be found at http://www.gov.ns.ca/natr/outcomes and this information will be updated again when the 2003-04 Accountability Report is released later in 2004.

DNR Performance Measures

Core Business: Natural Resources Management					
Outcome	**Measure**	**Data**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Sound Natural Resources Stewardship	Percentage of Crown land with Long Range Management Frameworks in place as of March 31	0% (2002)	0% (2003)	50%	• Devote resources to IRM teams and enhance capacity in GIS and modeling, to facilitate the completion of Long Range Management Frameworks (LRMFs).
	Number of "Species at Risk" partnerships in place as of March 31	5 (2002)	8 (2003)	10 to 15	• Establish partnerships to enable protection or recovery of species at risk.
	Area of wetland influenced by wetland stewardship agreements concluded during the year (hectares) (see Note 1 below)	497 (2001-02)	215 (2002-03)	300	• Work within the Eastern Habitat Joint Venture to establish wetland stewardship agreements.
	Number of Registered Buyers participating in Forest Sustainability Agreements during the year	35 (2002)	31 (2003)	70	• DNR staff will promote the development of Sustainability Agreements with the forest industry.
	Number of teachers and students receiving natural resources stewardship related training at the Wildlife Park annually	3,809 (2001-02)	3,800 (2002-03)	7,500	• Provide effective wildlife education programs for school groups with the opportunity to see the animals which are part of the lesson.
	Number of teachers and students receiving natural resources stewardship related training at the Natural Resources Education Centre annually	6,603 (2001-02)	7,097 (2002-03)	8,000	• Provide teacher in-service and professional development workshops. • Deliver education programs for school and youth groups at the Natural Resources Education Centre in Middle Musquodoboit.
	Percentage of province for which forest resource data is ten years old or less	50% (2002)	60% (2003)	100%	• Annual updating of forest inventory from air photography and satellite imagery. • Measurement of permanent sample plots. • Conversion of data into GIS database.
	Percentage of province for which geological maps are less than 25 years old	85% (2001-02)	85% (2002-03)	85%	• Prioritize geoscience mapping projects to address areas for which data are more than 25 years old. • Maximize the efficiency of re-mapping areas for which older data exist.

Core Business: Natural Resources Management					
Outcome	**Measure**	**Data**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Sound Natural Resources Stewardship	Number of new mineral occurrences added annually to the provincial mineral occurrences database	10 (2001-02)	23 (2002-03)	10	• Continue existing program to locate, catalogue and describe mineral occurrences. • Maximize efforts to acquire data on newly discovered occurrences, as opposed to updates of data for known occurrences.
	Percentage of province for which aggregate resource information is less than 20 years old	30% (2001-02)	35% (2002-03)	50%	• Continue existing program to locate, catalogue and describe bedrock and surficial aggregate resources. • Focus program on areas in province for which new aggregate resources are critical to economic development.
Conservation of Ecosystem Function	Percentage compliance with *Wildlife Habitat and Watercourses Protection Regulations* under the *Forests Act* (see Note 2 below)	NA (2001-02)	NA (2002-03)	90%	• Promote and enforce Regulations, including providing training and demonstrations. • Measure compliance.
	Percentage of park area meeting IUCN protection and natural areas criteria as of March 31	70% (2001-02)	80% (2002-03)	70%	• Identify properties for designation and prepare documentation.
	Percentage of active mine sites practicing progressive reclamation	58% (2001-02)	58% (2002-03)	65%	• Promote progressive reclamation with mine operators.
Species Diversity	Percentage of endangered and threatened species with recovery plans in place (see Note 3 below)	92% (2001)	92% (2002-03)	100%	• Create Recovery Teams for each listed species and provide support in developing Recovery Plans.
Public Safety	Number of students successfully trained annually	1,062 (2001-02)	1,269 (2002-03)	maintain	• Deliver hunter, bowhunter, and trapper education courses.
	Number of high risk abandoned mine shafts remediated annually on Crown lands (see Note 4 below)	(2001-02)	(2002-03)		• Maximize available funds through partnership programs. • Remediate mine shafts with available funds.
	• Abandoned Mines Program	5	34	14	
	• through partnerships	NA	33	30	
	• cooperation within government	NA	1	0	

Core Business: Natural Resources Management					
Outcome	**Measure**	**Data**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Effective Management of Resource Supply	Amount of silviculture investment on small private woodlots annually (millions of silvicultural credits)	8.3 (2002)	8.6 (2003)	$9.0	• Work with the forest industry to assist them in achieving full compliance with requirements of the *Forest Sustainability Regulations*. • Leverage private sector silviculture funding through Forest Sustainability Agreements.
	Percentage of required value of silviculture on private and industrial lands completed during the current year (see Note 5 below)	134% (2001)	130% (2002)	100%	• Implementation of Forest Strategy / *Forest Sustainability Regulations*. • Wood supply analysis / GIS system analysis. • Audits, monitoring and compliance programs. • Registry of Buyers. • Communication and information initiatives.
	Area of forest resource lost to fires annually (hectares) (see Note 6 below)	211 (2002)	1,257 (2003)	1,014 (less than)	• Fire detection system / fire prevention / fire suppression. • Acquisition and deployment of fire suppression resources. • Cooperation with volunteer fire departments, industry fire crews and municipalities.
	Percentage of hunting / trapping regulations reviewed annually	100% (2001-02)	100% (2002-03)	100%	• Monitor wildlife populations with potential for over or under harvest. • Consult with stakeholders. • Recommend regulatory amendments.
	Percentage of mineral related acts and regulations reviewed in the last five years	100% (2001-02)	100% (2002-03)	100%	• Regularly assess all mineral related legislation as they are utilized. • Schedule detailed assessments as required and identify and recommend necessary changes.
	Percentage of "One Window Interdepartmental Committee meetings held within three weeks of receipt of request (see Note 7 below)	NA (2001-02)	100% (2002-03)	100%	• Continue dialogue with mineral sector clients on the importance of the One Window process to ensure submission of comprehensive applications. • Continue interaction with other government departments to ensure timely meetings and decision-making by the One Window Committee.
Awareness of Resource Development Opportunities	Number of parks related partnerships as of March 31	7 (2001-02)	10 (2002-03)	increase	• Identify partnership opportunities within the park system. • Seek potential partners to develop and/or manage new parks. • Seek partners to upgrade park facilities and services.
	Number of requests annually for technical information and assistance from other government departments, regional development agencies, prospectors, developers, and mining companies	300 (2001-02)	350 (2002-03)	300	• Participate in provincial, national and international conferences and trade shows. • Increase amount of mineral promotion information on the departmental website. • Maintain a close liaison with the Office of Economic Development.
	Number of downloads annually of technical geoscience information from the departmental website (thousands)	11.1 (2001-02)	18.9 (2002-03)	15	• Continue ongoing program to post new geoscience information (maps, data and reports) on the departmental website. • Advertise availability of information at conferences and workshops and through department and external publications.

Core Business: Natural Resources Management					
Outcome	**Measure**	**Data**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Recreational Opportunities	Area of designated provincial parks as of March 31 (hectares)	14,900 (2001-02)	15,054 (2002-03)	increase	• Efficient and effective operation of provincial parks. • Identify potential properties for designation under the *Provincial Parks Act*.
	Length of trails in parks and on Crown lands as of March 31 (kilometres)	424 (2001-02)	504 (2002-03)	540	• Work with partners to develop additional trail opportunities. • Develop partnerships to facilitate development of additional trails.
Appreciation of Natural Resources	Number of visitors to Shubenacadie Wildlife Park annually (thousands)	98 (2002)	98 (2002-03)	90 to 100	• Provide a natural setting with appropriate enclosures for animals. • Provide educational messages to ensure people get a good understanding of NS wildlife.
	Annual occupancy rates at provincial camping parks	33.0% (2002)	31.1% (2003)	38%	• Upgrade facilities and services (market readiness). • Improve client services. • Work with the Department of Tourism, Culture and Heritage to increase the promotion of provincial parks.

Core Business Area: Crown Lands Administration					
Outcome	**Measure**	**Data**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
A Modern and Efficient Land Administration System	Percentage of acts, regulations, and policies reviewed during last five years as of March 31 (see Note 8 below)	46% (eleven of twenty-four) (2001-02)	68% (2002-03)	65%	• Regular assessment of all land administration acts, regulations, and policies as they are utilized. • Schedule detailed assessments as required and identify necessary changes.
	Percentage of main DNR offices able to access Crown land information electronically as of March 31	0% (0 of 7) (2001-02)	79% (11 of 14) (2002-03)	100% (seven of seven)	• Continued implementation of IT infrastructure and software needed to permit access to Crown land information electronically. • Seven DNR offices were originally identified as requiring access to Crown land information. These offices are: head office in Halifax, regional operations in Bridgewater, Truro, and Coxheath, parks in Belmont, forestry in Truro, and wildlife in Kentville. Seven other Crown Lands Survey offices have been added to the list of offices requiring electronic access; bringing the total to 14.

Performance Measures Notes:

1. Wetland Stewardship Agreements frequently cover large, discrete blocks of land. As a result, it is difficult to set a target for this measure. The department feels that arranging stewardship agreements covering 300 hectares in total annually is a reasonable target.

2. The *Wildlife Habitat and Watercourses Protection Regulations* came into effect in January 2002. Initially the department's focus was on educational programs for the forestry industry and woodlot owners that explained how the Regulations protect ecosystem function. The department is now shifting its focus to take a more active approach to compliance monitoring.

3. The percentage of endangered and threatened species with recovery plans in place on time is a measure that was created by combining two measures used in the past that reported endangered species and threatened species separately. Under the Endangered Species Act, plans are to be completed within a year of being listed as an endangered species and within two years of being listed as a threatened species.

4. The measure for the number of high risk abandoned mine openings remediated annually was expanded to better account for the amount of work being done in this area. Previously only mine shafts that were filled were included, however a significant number of mine shafts have also been fenced, which has required a considerable amount of resources. In addition, work has been completed outside the Abandoned Mines Program, either through partnership arrangements with companies doing work on Crown land, or elsewhere within government when dealing with emergency situations requiring immediate attention and remediation action. It was felt that it was appropriate to expand the measure to reflect these additional accomplishments.

5. After the *Forest Sustainability Regulations* came into effect, the requirement for registered buyers to carry out silviculture activities was phased in during a transitional period. Requirements during the transitional period were set at less than the 100% level required after the transition period ended. However the intention of this measure was to track the aggregated compliance of individual buyers in meeting their obligations. Each buyer would have a specific amount of silviculture they were responsible for and they were expected to complete 100% of this amount. Industrial and private lands are defined in the *Registration and Statistical Returns Regulations*. "Industrial landowner" means a landowner who owns a wood processing facility while "private landowner" means a landowner who does not own a wood processing facility.

6. For this measure the term "target" is inappropriate terminology. A more accurate description would be to describe it as a desired ceiling. The area of forest resource lost to fires annually can fluctuate considerably from year to year. A target is difficult to set since a year with one or two large fires can easily exceed any "target" by a significant amount. Our ceiling is based on a ten year average and can be viewed as an upper limit we hope to stay below. However the very nature of a ten year average (moving averages) means that there will be some years below the average and some years above the average.

7. This measure tracks one aspect of service to clients, by measuring the timeliness of One Window reviews of mining projects.

8. This measure was expanded to include policies that are used to administer Crown lands (some of these affect private lands as well).